

Title (en)

Method and apparatus for measuring heartbeat rate.

Title (de)

Verfahren und Gerät zur Messung der Herzfrequenz.

Title (fr)

Procédé et dispositif de mesure de la fréquence cardiaque.

Publication

EP 0075851 A2 19830406 (EN)

Application

EP 82108752 A 19820922

Priority

US 30632981 A 19810928

Abstract (en)

Heart rate monitoring apparatus and a related method for detecting the successive beats of a heart and providing a reliable estimate of heartbeat rate. The apparatus comprises a heart rate monitor comprising: means (15) for measuring the time intervals between successive beats of a heart and for producing a corresponding sequence of timing measurements; microprocessor means (17) for grouping the timing measurements into a prescribed set and adjusting a particular measurement of the set in a prescribed fashion, to produce an adjusted set of timing measurements, and for averaging the adjusted set of timing measurements, to produce an estimate of heartbeat rate. The particular measurement that differs most from the computed average is adjusted to be equal to that average, and the adjusted set of measurements is then averaged. These latter steps of adjusting and averaging are repeated a prescribed number of times, and the last-computed average is displayed as an estimate of heartbeat rate on a display (19). The entire procedure is repeated upon the occurrence of each successive heartbeat.

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